MAY - 5 2004

#### Section II

# 510(k) SUMMARY

This summary of 510(k) safety and effectiveness information is submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.

#### 510(k) Number:

Date

April 9, 2004

Submitter

Intuitive Surgical 950 Kifer Road

Sunnyvale, CA 94086

**ER Number** 

2955842

Contact

Mike Yramategui

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**New Device** 

Name: EndoPass Endoscopic Delivery Instrument

Classification Name: System, Surgical, Computer Controlled Instrument

Common Name: Endoscopic Instrument, Delivery Instrument

Predicate Devices

Intuitive Surgical® Endoscopic Instrument Control System and Intuitive

Surgical<sup>®</sup> Endoscopic Instruments and accessories

(legally marketed under K990144 / K002489 / K011002 / K013416 / K021036 /

K022574)

Device Description This special 510(k) is being submitted for a modification of *Intuitive* Surgical® Endoscopic Instruments to include the EndoPass Endoscopic Delivery Instrument. The EndoPass Endoscopic Delivery Instrument is similar to the Clip Applier instrument originally cleared by FDA in 2000

(K990144).

## Device Description (continued)

The EndoPass Endoscopic Delivery Instrument is used with the *Intuitive Surgical*® Endoscopic Instrument Control System, also known as the *da Vinci*® Surgical System. The *da Vinci*® Surgical Systemconsists of two integrated sub-systems as follows:

Intuitive Surgical® Endoscopic Instrument Control System: This subsystem is comprised of the Surgeon Console and Patient Side Cart. While seated at the Surgeon Console, the surgeon controls critical aspects of the procedure, including movement of the endoscopic instruments and endoscope, within the operative field. Endoscopic instrument and camera movements are controlled by the surgeon through use of the Master Tool Manipulators (MTM), two hand operated mechanisms residing within the Surgeon Console. The endoscopic instruments are held in a fixed position (with respect to the patient) by either two (or optionally three) unique arms known as Patient Side Manipulators (PSM), which are located on the Patient Side Cart (PSC). The endoscope is also held in a fixed position (with respect to the patient) by another arm, similar to the PSM, known as the Endoscope Camera Manipulator (ECM) and also located on the PSC. Commands from the Surgeon Console are relayed to the PSC, which is located immediately adjacent to the patient, via cables. Instrument and endoscope changes are performed by another provider positioned adjacent to the PSC.

Intuitive Surgical® Stereo View Endoscopic System: The endoscopic vision system used with the da Vinci® Surgical System, also known as Intuitive Surgical® Insite™ Vision System, consists of a stereo endoscope, endoscopic camera, and various accessories, including a light source and light guides. The Insite™ Vision System provides two independent images that are relayed to the viewer located in the Surgeon Console, where they are fused to form a 3-D (or alternatively a 2-D image) image of the surgical field.

#### **Intended Use**

The Intuitive Surgical® Endoscopic Instrument Control System (hereinafter referred to as the "da Vinci® Surgical System") is intended to assist in the accurate control of Intuitive Surgical\* Endoscopic Instruments including rigid endoscopes, blunt and sharp endoscopic dissectors, scissors, scalpels, forceps/pick-ups, needle holders, endoscopic retractors, stabilizers, electrocautery and accessories for endoscopic manipulation of tissue, including grasping, cutting, blunt and sharp dissection, approximation, ligation, electrocautery and suturing during general laparoscopic surgical procedures, general non-cardiovascular thoracoscopic surgical procedures, and thoracoscopically-assisted cardiotomy procedures. It is intended to be used by trained physicians in an operating room environment in accordance with the representative, specific procedures set forth in the Professional Instructions for Use.

# Intended Use (continued)

Intuitive Surgical® Endoscopic Instruments including scissors, scalpels, forceps/pick-ups, needle drivers and electrocautery are intended for endoscopic manipulation of tissue, including: grasping, cutting, blunt an sharp dissection, approximation, ligation, electrocautery and suturing.

## Comparison to Predicate Device

The Intuitive Surgical® EndoPass Endoscopic Delivery Instrument described herein is essentially identical in terms of shape, function, activation, and use to the predicate Class II endoscopic instrument cited The primary difference is that the predicate device is intended to deliver and apply a surgical clip to ligate vessels; the subject device is intended of deliver general accessories, such as suture, needles and clamps, to the surgical site under the direct control of the console surgeon.

## Technological Characteristics

The technological characteristics of the subject devices are the same as or the predicate devices.

# Performance Data

Design analysis and comparison, as well as *in vitro* testing, confirm that basic functional characteristics are substantially equivalent to the predicate device cited, and that design output meets the design input requirements.

#### Conclusion

Based upon the product technical information, intended use, and performance information provided in this pre-market notification, the *Intuitive Surgical*® EndoPass Endoscopic Delivery Instrument describe I herein has been shown to be substantially equivalent to the current legal y marketed predicate device, and the results of the design control process confirm that the design output meets the design input requirements.





Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

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Mr. Michael H. Yramategui Director, Regulatory Affairs Intuitive Surgical, Inc. 950 Kifer Road Sunnyvale, California 94086

Re: K040948

Trade/Device Name: Intuitive Surgical® Endoscopic Instrument, EndoPass Endoscopic

**Delivery Instrument** 

Regulation Number: 21 CFR 876.1500

Regulation Name: Endoscope and accessories

Regulatory Class: II Product Code: NAY Dated: April 9, 2004 Received: April 12, 2004

Dear Mr. Yramategui

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

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This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4659. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <a href="http://www.fda.gov/cdrh/dsma/dsmamain.html">http://www.fda.gov/cdrh/dsma/dsmamain.html</a>

Sincerely yours,

Muriam C. Provost Garcelia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative and Neurological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

# Indications for Use

510(k) Number (if known): K040948 Device Name: Intuitive Surgical® Endoscopic Instrument, EndoPass Endoscopic Delivery Instrument Indications For Use: The Intuitive Surgical® Endoscopic Instrument Control System (hereinafter referred to as the " da Vinci® System") is intended to assist in the accurate control of Intuitive Surgical® Endoscopic Instruments including rigid endoscopes, blunt and sharp endoscopic dissectors, scissors, scalpels, forceps/pick-ups, needle holders, endoscopic retractors, stabilizers, electrocautery and accessories for endoscopic manipulation of tissue, including grasping, cutting, blunt and sharp dissection, approximation, ligation, electrocautery and suturing during general laparoscopic surgical procedures, general non-cardiovascular thoracoscopic surgical procedures, and thoracoscopically-assisted cardiotomy procedures. It is intended to be used by trained physicians in an operating room environment in accordance with the representative, specific procedures set forth in the Professional Instructions for Use. Intuitive Surgical® Endoscopic Instruments including scissors, scalpels, forceps/pick-ups, needle drivers and electrocautery are intended for endoscopic manipulation of tissue, including: grasping, cutting, blunt and sharp dissection, approximation, ligation, electrocautery and suturing. Over-The-Counter Use Prescription Use \_\_\_x\_\_\_ (Part 21 CFR 801 Subpart D) AND/OR (21 CFR 807 Subpart C) (PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED) Concurrence of CDRH, Office of Device Evaluation (ODE) (Division Sign-Off) Division of General, Restorative, and Neurological Devices

510(k) Number <u>K040948</u>

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